



sequence listing_CRF
SEQUENCE LISTING

RECEIVED
JUL 17 2002
TECH CENTER 1600/2900

<110> Meloen, Robert H

Oonk, Hendrica B

<120> PEPTIDE, IMMUNOGENIC COMPOSITION AND VACCINE OR MEDICAL PREPARATION, A METHOD TO IMMUNISE ANIMALS AGAINST THE HORMONE LHRH, AND ANALOGS OF THE LHRH TANDEM REPEAT PEPTIDE AND THEIR USE AS VACCINE

<130> 3516.2US

<140> US 09/876,257

<141> 2001-06-06

<160> 6

<170> PatentIn version 3.1

<210> 1

<211> 10

<212> PRT

<213> Unknown

<220>

<223> Luteinising Hormone Releasing Hormone (LHRH) from the hypothalamus of an undisclosed mammal.

<220>

<221> misc_feature

<222> (1)..(1)

<223> X at position 1 = pyroglutamic acid

NOT ENTERED

NOT ENTERED

Do not
enter
JSL
9/12/2002

sequence listing_CRF

<220>

<221> misc_feature

<222> (10)..(10)

<223> X at position 10 = glycine amide

<400> 1

Xaa	His	Trp	Ser	Tyr	Gly	Leu	Arg	Pro	Xaa
1			5						10

<210> 2

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Vaccine against LHRH from the hypothalamus of an undisclosed mammal.

<220>

<221> misc_feature

<222> (1)..(1)

<223> X at position 1 = preferably pyroglutamic acid, but can also be glutamine having attached thereto a tail comprising one or more additional amino acids

<220>

<221> misc_feature

<222> (3)..(3)

<223> X at position 3 = tryptophan or formylated tryptophan

<220>

<221> misc_feature

<222> (14)..(14)

sequence listing_CRF

<223> X at position 14 = tryptophan or formylated tryptophan

<220>

<221> misc_feature

<222> (10)..(20)

<223> The sequence comprising residues 10-20 may be repeated.

<220>

<221> misc_feature

<222> (11)..(11)

<223> X at position 11 = either a direct bond or a spacer group between the amino acids glycine and glutamine; the spacer group may greatly vary from one or more amino acids to a shorter or longer hydrocarbon chain and other compound groups or molecules.

<220>

<221> misc_feature

<222> (21)..(21)

<223> X at position 21 = either Gly-NH₂ or Gly having attached thereto a tail comprising one or more additional amino acids; preferably Gly-Cys-NH₂, the C terminal cysteine being added in connection with a possible coupling of the peptide to a carrier protein.

<400> 2

Xaa	His	Xaa	Ser	Tyr	Gly	Leu	Arg	Pro	Gly	Xaa	Gln	His	Xaa	Ser	Tyr
1				5					10					15	

Gly	Leu	Arg	Pro	Xaa
			20	

<210> 3

<211> 22

<212> PRT

<213> Artificial Sequence

sequence listing_CRF

<220>

<223> Vaccine against LHRH from the hypothalamus of an undisclosed mammal.

<220>

<221> misc_feature

<222> (1)..(1)

<223> X at position 1 = pyroglutamic acid

<220>

<221> misc_feature

<222> (3)..(3)

<223> X at position 3 = tryptophan or N-formyl-Trp

<220>

<221> misc_feature

<222> (13)..(13)

<223> X at position 13 = tryptophan or N-formyl-Trp

<220>

<221> misc_feature

<222> (10)..(19)

<223> The sequence comprising residues 10-19 may be repeated.

<220>

<221> misc_feature

<222> (22)..(22)

<223> X at position 22 = NH2

<400> 3

Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly

sequence listing_CRF

1 5 10 15

Leu Arg Pro Gly Cys Xaa
20

<210> 4

<211> 21

<212> PRT

<213> Artificial Sequence

<220>

<223> Vaccine against LHRH from the hypothalamus of an undisclosed mammal.

<220>

<221> misc_feature

<222> (1)..(1)

<223> X at position 1 = pyroglutamic acid

<220>

<221> misc_feature

<222> (6)..(6)

<223> X at position 6 = a possible replacement of glycine by a dextrorotatory amino acid which in addition contains a side chain by which the LHRH tandem unit can be coupled to a carrier compound.

<220>

<221> misc_feature

<222> (16)..(16)

<223> X at position 16 = a possible replacement of glycine by a dextrorotatory amino acid which in addition contains a side chain by which the LHRH tandem unit can be coupled to a carrier compound.

<400> 4

Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Gln His Trp Ser Tyr Xaa

sequence listing_CRF
10

1

5

15

Leu Arg Pro Gly Cys
20

<210> 5

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Vaccine against LHRH from the hypothalamus of an undisclosed mammal.

<220>

<221> misc_feature

<222> (1)..(1)

<223> X at position 1 = pyroglutamic acid

<220>

<221> misc_feature

<222> (6)..(6)

<223> X at position 6 = Gly or a dextrorotatory amino acid containing a side chain that allows coupling to a carrier compound.

<400> 5

Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Cys
1 5 10

<210> 6

<211> 21

<212> PRT

<213> Artificial Sequence

sequence listing_CRF

<220>

<223> Vaccine against LHRH from the hypothalamus of an undisclosed mammal.

<220>

<221> misc_feature

<222> (21)..(21)

<223> X at position 21 = glycine amide or Gly-Cys

<220>

<221> misc_feature

<222> (1)..(21)

<223> The initial cysteine of the peptide comprising residues 1-21 is joined to the initial cysteine of an identical peptide (residues 22-42) to form a dimer.

<220>

<221> misc_feature

<222> (1)..(1)

<223> X at position 1 = Cys-Gln

<400> 6

Xaa	His	Trp	Ser	Tyr	Gly	Leu	Arg	Pro	Gly	Gln	His	Trp	Ser	Tyr	Gly
1				5					10					15	

Leu	Arg	Pro	Gly	Xaa
			20	